



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,374	09/12/2005	Milan Jelinek	871V.0138.U1(US)	2531
10/48 7590 11/23/2010 Harrington & Smith, Attorneys At Law, LLC 4 Research Drive, Suite 202 Shelton, CT 06484				
EXAMINER				
HE, JIALONG				
ART UNIT		PAPER NUMBER		
2626				
MAIL DATE		DELIVERY MODE		
11/23/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,374

Applicant(s)

JELINEK ET AL.

Examiner

JIALONG HE

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 3, 6, 14, 19, 32, 63-65, 67, 69-72, 74-78, 81-89, 91-95 and 114-142 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 142 is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☒ Claim(s) 6, 114, 121, 126, 130, 136 and 141 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims rejected are 2,3,14,19,32,63-65,67,69-72,74-78,81-89,91-95,114-120,122-125,127-135 and 137-140.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

2. Applicant's arguments filed on 10/28/2010 have been fully considered but they are not persuasive for the following reasons.

Applicant amended independent claims 14, 19, 32, 75, 81, 85 and 92 by adding a new feature: discarding a portion of coding parameters and keeping the remaining signal coding parameters unchanged.

Applicant argues (Remarks, page 20-21) that Proctor (US Patent 5,519,779) re-encoding the signal coding parameters and fails to disclosed the new limitation in the amended claim 14.

Applicant further argues (Remarks, page 21) that Xu (US Patent 6,885,635) "Xu discloses selectively dropping entire packets.", "Xu cannot be seen to disclose or suggest "in response to the request, **discarding a portion of the signal-coding parameters** in said frame and **keeping remaining signal-coding parameters unchanged in said frame** to enable transmission of the frame using the second communication mode," as recited in claim 14. (Emphasis in original Remarks).

Applicant further argues (Remarks, page 21): "It is noted that Chen is not seen to remedy the above-noted defects of Proctor and Xu."

In response, the Examiner notes that the claim 14 was rejected as obvious over Proctor in view of Xu and further in view of Chen. Proctor discloses in-band signaling by re-encoding high rate speech frames into lower rate speech frames to reduce bit rate (col. 5, line 62 – col. 6, line 30). Since re-encoding a frame will change all coding parameters for the frame, the Examiner agrees that Proctor does not teach the new feature in the amended claim 14.

Regarding the argument that Xu does not teach "discarding a portion of signal coding parameters" because Xu dropping entire packets (Remarks, page 21), The Examiner noted that in packet communication, coding parameters for a frame of speech signal are transmitted in multiple packets. Each packet contains only a portion of speech coding parameters. Although the Examiner does not agree with applicant's argument towards Xu's reference, the Examiner does not rely on Xu for teaching the new feature in the amended claim 14.

Regarding the argument "Chen is not seen to remedy the above-noted defects of Proctor and Xu". The Examiner respectively disagrees and pointed out that Chen (US Patent 6,014,621) discloses a method of encoding and transmitting a wideband speech

signal at target bit rate 16 – 32 kbps (**Chen, Summary of the invention**). In the case a limited bandwidth at 16 kbps, Chen discloses allocating bits only for frequency coefficients between 0 to 4 kHz and no bits being allocated for frequency coefficients between 4 and 7 kHz, which means discarding frequency coefficients between 4 kHz and 7 kHz and keeping frequency coefficients from 0 to 4 kHz unchanged (**Chen, Summary of invention, col. 11, line 64 – col. 12, line 6**).

Both Proctor and Chen are in speech coding area and are solve a similar problem of transmitting high bit rate encoded speech signals over a bandwidth limited channel. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Proctor's teaching with Chen's teaching to not allocate bits for some coding parameters (i.e., discarding these parameters) and keeping the remaining coding parameters unchanged to get a better speech quality over the bandwidth limited channel (Chen, col. 1, lines 54-60).

The applicant argues (Remarks, page 21-22) independent claims 19, 32, 85, 75, 81, 92 are allowable due to the similar feature as in claim 14. For the same reason explained above, the argument is not persuasive.

The applicant argues (Remarks, page 21-22) dependent claims 69-72, 74, 86-89, 91, 117-126, 76-78, 82-84, 93-95 and 127-141 are allowable due to their

dependence from their corresponding independent claims. For the same reason explained above, the argument is not persuasive.

Claim Objections

3. Claims 75, 81, 86, 121, 137 and 142 are objected to because of the following informalities:

Claims 75 and 81, line 8, recite "**a** second portion of the signal coding parameters". Since antecedent limitation at line 3 already recites "a second portion of the signal coding parameters". It is suggested to change "a" to "the".

Claim 86, line 3, recites "**the** first communication scheme". Since nowhere in antecedent limitation mentions "first communication scheme", article "the" should be changed.

Claim 121, line 3, recites "the **second communication system**". Since antecedent limitation only mentions "**a second system**", it is suggested to delete word "communication" in the limitation.

Claim 137, line 8, recite "**a** second communication scheme". Since antecedent limitation (in claim 135) already recites "**a** second communication scheme". Article "a" should be changed to "the".

Claim 142, line 17, recite **"the** first communication". Antecedent limitations only mention "a first communication mode" and "a first communication scheme", nowhere in antecedent limitation mentions "first communication".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. Claims 2, 14, 32, 67, 71, 75, 76, 81, 85, 88, 92, 93, 116-118, 123, 124, 127, 128, 132, 133, 138 and 139 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proctor (US Pat. 5,519,779, previously cited, hereinafter referred to as Proctor) in view of Xu et al. (US pat. 6,885,638, previously cited, hereinafter referred to as Xu) and further in view of Chen (US Pat. 6,014,621, previously cited, hereinafter referred to as Chen).

Regarding claims 14, 32 and 85, Proctor discloses a method and device comprising:

receiving a request to transmit a frame using a second communication mode to reduce bit rate during transmission of said frame, wherein the frame comprises signal-coding parameters representative of a sound signal and wherein the frame is encoded in accordance with a first communication mode (**fig. 1, also col. 3, line 35 –**

col. 5, line 60, in-band signaling using dim-and-burst method in wireless communication);

in response to the request, dropping a portion of the signal-coding parameters to enable transmission of the frame using the second communication mode (**col. 5, lines 47- 67, rate reducer mapping a higher rate to a lower rate, e.g., from Full-rate to Half-Rate, which reduces the total number of signal coding parameters (dropping a portion));**

Proctor discloses a wireless communication system using CDMA. In order to insert in-band signaling, coding parameters of full-rate is reduced to half-rate to free bandwidth for signaling. Both Proctor and the instant applicant are in the same area of reducing bit rate of coding parameter for in-band signaling using dim-and-burst method.

Proctor discloses mapping a speech encoded at full-rate to a half-rate which implicitly teaches necessary information is inserted into the frame header to indicate the bit rate changes. Proctor does not explicitly disclose what information is inserted in the frame header.

Xu discloses a system of using dim-and-burst for in-band signaling. Xu discloses inserting information in the frame header so that the frame could be selected and decoded based on the frame header (**Xu, fig. 3 and fig. 5, various**

information in the frame header to enable receiver to process the frame and obtaining communication mode).

Proctor and Xu are analogous art and from a similar field of applicant's endeavor in wireless communication. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Proctor's teaching with Xu teaching to insert information such as communication mode, bit rate and other information necessary for correctly decoding the frame. One having ordinary skill in the art would have been motivated to make such a modification because adding the header information is absolutely necessary for properly transmitting and decoding the frame after it is modified.

Proctor discloses mapping a high rate frame to a low rate frame to reduce bit rate (col. 5, line 61 - col. 6, line 35), which causes all coding parameters changed. Proctor in view Xu fails to discloses discarding a portion of the signal-coding parameters in said frame and keeping remaining signal-coding parameters unchanged in said frame to enable transmission of the frame using the second communication mode, a version of the frame encoded in accordance with the first communication mode.

Chen discloses a method of encoding and transmitting a wideband speech signal at target bit rate 16 – 32 kbps (**Chen, Summary of the invention**). In the case the there

limited bandwidth at 16 kbps, Chen discloses allocating bits only for frequency coefficients between 0 to 4 kHz and no bits being allocated for frequency coefficients between 4 and 7 kHz, which means discarding frequency between 4 kHz and 7 kHz coefficients and keeping frequency coefficients from 0 to 4 kHz unchanged (**Chen, Summary of invention, col. 11, line 64 – col. 12, line 6; At decoding side, generating magnitude spectrum according to signal-to-masking ratio and generating phase spectrum randomly**).

Proctor, Xu, and Chen are analogous art and from a similar field of applicant's endeavor in speech coding. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Proctor in view of Xu's teaching with Chen's teaching to obtain a version of frame encoded in accordance with full rate (wideband). One having ordinary skill in the art would have been motivated to make such a modification to improve sound quality (**Chen, col. 2, lines 12-55**).

Regarding claims 75, 81 and 92, Proctor discloses a device/method comprising:
means for receiving a frame using a second communication mode, wherein the frame comprises information and a second portion of signal-coding parameters (**Proctor, fig. 1, col. 3 – col. 4, in-band signaling using dim-and-burst, reducing encoded speech rate from full rate to half rate(a second communication mode)**);

Proctor discloses a wireless communication system using CDMA. In order to insert in-band signaling, coding parameters of full-rate is reduced to half-rate to free bandwidth for signaling. Both Proctor and the instant applicant are in the same area of reducing bit rate of coding parameter for in-band signaling using dim-and-burst method.

Proctor discloses mapping a speech encoded at full-rate to a half-rate which implicitly teaches necessary information is inserted into the frame header to indicate the bit rate changes. Proctor does not explicitly disclose what information is inserted in the frame header.

Xu discloses a system of using dim-and-burst for in-band signaling. Xu discloses inserting information in the frame header so that the frame could be selected and decoded based on the frame header (**Xu, fig. 3 and fig. 5, various information in the frame header to enable receiver to process the frame and obtaining communication mode**).

Proctor and Xu are analogous art and from a similar field of applicant's endeavor in wireless communication. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Proctor's teaching with Xu teaching to insert information such as communication mode, bit rate and other information necessary for correctly decoding the frame. One

having ordinary skill in the art would have been motivated to make such a modification because adding the header information is absolutely necessary for properly transmitting and decoding the frame after it is modified.

Proctor and Xu do not disclose generating replacement for dropped encoding parameters and enable transmitting the restored speech in full rate (the first communication mode).

Chen discloses a method of encoding a wideband speech signal by only allocating bits for coding parameters between 0 to 4 kHz and no bits are allocated for high frequency parameters between [4 kHz, 7 kHz], and regenerating these parameters at the decoder side (**Chen, fig. 10 and summary of invention, allocating bits only for parameters between 0 - 4 kHz, not bits allocated for higher frequency between 4 – 7 kHz at encoder side; generating magnitude spectrum according to signal-to-masking ratio and random phase at the decoder side. The generated parameters for higher frequency components together with parameters of low frequency components could be used (enabled) for transmitting speech at full rate.**)

Proctor, Xu and Chen are analogous art and from a similar field of applicant's endeavor in speech coding. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Proctor's teaching with Chen's teaching to generate replacement for dropped coding parameters. One

having ordinary skill in the art would have been motivated to make such a modification because it could encode wideband speech and transmit over limited bandwidth and sound quality is improved (**Chen, col. 2, lines 12-55**).

Regarding claims 2, 71, 88, 117, 123, 138, 127 and 132, Proctor further discloses the first communication mode is a full-rate communication mode and the second communication mode is a half-rate communication mode (**Proctor, col. 5, table 1**).

Regarding claim 67, Proctor further discloses further comprising an initial step of encoding the sound signal in accordance with the first communication mode of the first communication scheme (**Proctor, col. 5, lines 47-67, initially encoded with full rate, reduced to half rate**).

Regarding claims 116, 118, 124, 128, 139 and 133 Proctor further discloses wherein the particular communication mode comprises a signaling half rate communication mode or an interoperable half rate communication mode (**Proctor, fig. 1, and col. 5, table, signaling using dim-and-burst, reducing rate from full to half, which is a signaling half rate communication mode**).

Regarding claims 76, 93, Chen further discloses wherein the means for generating replacement signal-coding parameters is further for randomly generating the

replacement signal-coding parameters (**Chen, col. 2, lines 45-50, phase values are randomly selected**).

5. Claims 3, 19, 63, 65, 69, 74,78,82-84, 86,91,95,115,119,122,125,129,131, 134,135,137 and 140 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proctor in view of view of Xu, Chen and further in view of El-Maleh (US PG Pub. 2002/0101844, previously cited, hereinafter referred to as El-Maleh).

Regarding claims 3, 63, 69, 74,78,82-84, 86,91,95,115,119,122,125,129,131, 134,135,137 and 140, Proctor discloses in-band signaling using dim-and-burst in a CDMA system (**Proctor, col. 5, table 1, full rate, half rate used in CDMA communication**),

Proctor does not disclose interoperable between two systems and the first rate of the first system is compatible with the second system and the second rate of the first system is not compatible with the second system.

El-Maleh discloses interoperability between CDMA (using CTX 1/8 rate) and GSM systems (using DTX) for generating comfort noise. The coding for active speech (e.g., full rate) is interoperable between two systems, but for inactive speech (comfort noise) at 1/8 rate of CTX is not compatible with DTX.

Proctor, Xu, Chen and El-Maleh are analogous art and from a similar field of applicant's endeavor in wireless communication. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Proctor in view of Xu and Chen's teaching with El-Maleh's teaching of interoperation between first and second systems. One having ordinary skill in the art would have been motivated to make such a modification because it is more convenient that a user using CDMA system could communicate with other users using GSM system.

Regarding claims 19 and 65, Proctor discloses a system comprising a first station (**fig. 1, #12, mobile phone at sending end**), second station (**fig. 1, #10, cell phone tower**) and third station (**#20, mobile phone at receiving end**),

said first station comprising:

means for receiving a request to transmit a frame using a second communication mode a first communication scheme to reduce bit rate during transmission of said frame, wherein the frame comprises signal-coding parameters representative of a sound signal and wherein the frame is encoded in accordance with a first communication mode of the first communication scheme (**fig. 1, col. 3, line 35 – col. 6, line 65, mobile phone communication using dim-and-burst for signaling by dropping some coding parameters (LSP, codebook index), using CDMA as an example (first communication scheme), half rate (second communication mode)**),

means for dropping, in response to said request, a first portion of the signal-coding parameters to enable transmission of the frame using the second communication mode of the first communication scheme (**fig. 1, col. 5, line 61 – col. 6, line 15, #40, rate reducer, from full rate to half rate which is reducing (dropping) coding parameters**),

means for transmitting the remaining signal coding parameters frame using the second communication mode of the first communication scheme (**fig. 1, #18, transmitting reduced rate of coded speech to receiver #44**);

said second station comprising:

means for receiving the remaining transmitted frame, wherein the transmitted frame comprises the information and a second portion of the signal-coding parameters (**fig. 1, #18, #20, mobile phone at receiving end; col. 1, lines 40-42, the encoded signal is transmitted to a receiving unit**),

means for transmitting the frame in accordance with the communication mode of the first communication scheme signal coding parameters using the remaining signal coding parameters (**fig. 1, #18, #20, signal from base station to a receiving mobile phone**).

Proctor discloses using "dim-and-burst" method to transmit signals by reducing frame rates from a full-rate to a half-rate in mobile communication. Although Proctor mentioned communication system could be a TDMA system (**col. 1, line 49**), Proctor uses a CDMA system as an example when describing his system (**col. 3, line 42**). Proctor does not disclose interoperation between a first communication scheme and second communication scheme.

El-Maleh discloses the first communication mode of the first communication scheme is interoperable with a first communication mode of a second communication scheme and the second communication mode of the first communication scheme is not interoperable with the first communication mode of the second communication scheme (**El-Maleh, [0008-0010], CTX (CDMA system) and DTX (GSM system) is interoperable for speech segments (first mode) but inoperable for non-speech segments (1/8 rate, second mode)**)).

Proctor and El-Maleh are analogous art and from a similar field of applicant's endeavor in speech coding. It would have been obvious to one of ordinary skill in the art at the time of the invention to include compatible operation for speech segments and incompatible for non-speech segments as taught by El-Maleh in Proctor's teaching since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods, and in the combination each element merely would have performed the same function as it did

separately. "A combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." KSR, 550 U.S. ___, 82 USPQ2d at 1395 (2007). One of ordinary skill in the art would have recognized that the results of the combination were predictable.

Proctor discloses using "dim-and-burst" method to transmit signals by reducing frame rates from a full-rate to a half-rate in mobile communication. Although Proctor discloses the rate is reduced from full-rate to half-rate (col. 5, line 45 – col. 6, line 15), Proctor does not explicitly disclose inserting information into the frame, wherein the information indicates that the frame is encoded in accordance with a particular communication mode of the first communication scheme that involves dropping the first portion of the signal-coding parameters.

Xu discloses in-band signaling method by dropping some packets to reduce communication congestion. Xu discloses inserting information into the frame, wherein the information indicates that the frame is encoded in accordance with a particular communication mode of the first communication scheme that involves dropping the first portion of the signal-coding parameters (**Xu, fig. 3, frame format with information bit segments 302 and 308; fig. 5 and fig. 6, shows 302 has 3 bits and 308 has 3 bits, indicating a particular communication mode, such as full rate, or half rate**).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Proctor's teaching with Xu's teaching to insert bit segments to indicate that the frame is encoded in accordance with a particular communication mode. One having ordinary skill in the art would have been motivated to make such a modification because the quality of service of wireless communication can be improved (**Xu, col. 2, liens 20-25**).

Proctor does not disclose means for generating replacement signal coding parameters to replace dropped coding parameters.

Chen discloses a method of encoding a wideband speech signal by dropping high frequency parameters between [4 kHz, 7 kHz] and regenerating these parameters at the decoder side (**Chen, fig. 10, col. 2, lines 11-55, at encoding side, not bits allocated for higher frequency; at decoding side, generating magnitude spectrum according to signal-to-masking ratio and generating phase spectrum randomly**).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Proctor, El-Maleh, Xu's teaching with Chen's teaching to obtain a version of frame encoded in accordance with full rate (wideband). One having ordinary skill in the art would have been motivated to make such a modification to improve sound quality (**Chen, col. 2, lines 12-55**).

6. Claims 64, 70, 77, 87 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proctor in view of Xu, Chen and further in view of Jacobs et al. (US Pat. 5,414,796, previously cited, hereinafter referred to as Jacobs).

Regarding claims 64, 70, 77, 87 and 97, the modified teaching of Proctor discloses in-band signaling by dim-and-burst and regenerating dropped coding parameters at decoder side.

Proctor fails to but Jacobs discloses the dropped portion of the signal-coding parameters comprises fixed codebook indices and wherein generating replacement signal-coding parameters comprises randomly generating replacement fixed codebook indices (**Jacobs, col. 12, lines 44-60, generates random code vectors**).

Proctor and Jacobs are analogous art and from a similar field of applicant's endeavor in speech coding. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Proctor's teaching with Jacobs's teaching to adjust bit rate based on the decided rate and rate control commands (a request) and drop codebook index to reduce bit rate. The claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

7. Claims 72 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proctor in view of Xu, Chen and further in view of Garg ("IS-95 CDMA and CDMA 2000", previously cited, Prentice Hall, 2000).

Regarding claims 72 and 89, Proctor discloses in-band signaling using dim-and-burst using CDMA devices. Proctor fails to but Garg discloses the device is a CDMA2000 system.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to substitute CDMA with CDMA2000, since each individual element and its function are shown in the prior art and one of ordinary skill in the art could have substituted one known element for another by known methods. "Simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement." KSR, 550 U.S. ___, 82 USPQ2d at 1395 (2007). One of ordinary skill in the art would have recognized that the results of the simple substitution were predictable.

Allowable Subject Matter

8. Claim 142 is allowed.

See reasons for allowance in the office action mailed on 07/27/2010.

9. Claims 6, 114, 121, 126, 130, 136 and 141 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

See reasons for indicating allowable subject matter in the office action mailed on 07/27/2010.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hagen (US Patent 6,182,030) discloses dropping certain speech coding parameters and keeping the rest unchanged to lower bit rates (col. 9, lines 35-45).

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JIALONG HE whose telephone number is (571) 270-5359. The examiner can normally be reached on Monday-Thursday, 7:00 - 4:30, Alt Friday, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Wozniak can be reached on (571) 272-7632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James S. Wozniak/
Supervisory Patent Examiner, Art Unit 2626
/JH/